

CLAIM AMENDMENTS

IN THE CLAIMS

This listing of the claims will replace all prior versions, and listing, of claims in the application or previous response to office action:

1.-26. (Cancelled).

27. (New) A computer network for generating instructions for use by photomask manufacturing equipment, comprising:

a computer accessible to a remote customer computer via a remote network connection, and during the network connection, the computer operable to receive photomask specification data and design data from the customer computer;

a database in communication with the computer, operable to store the photomask specification data and the design data;

a command generator in communication with the photomask specification database, the command generator operable to generate fracturing instructions and control instructions based on the photomask specification data; and

a fracture engine that uses the fracturing instructions and design data to generate fractured pattern data.

28. (New) The network of Claim 27, further comprising the computer operable to receive the design data from the customer computer in electronic form.

29. (New) The network of Claim 28, further comprising the computer operable to receive the design data and the photomask specification data during a single network connection.

30. (New) The network of Claim 27, further comprising the command generator operable to deliver the control instructions to data storage accessible by the photomask manufacturing equipment.

31. (New) The network of Claim 27, further comprising the fracture engine operable to deliver the fractured pattern data to data storage accessible by the photomask manufacturing equipment.

32. (New) The network of Claim 27, wherein the database comprises:
a specification database operable to store the photomask specification data;
and
a customer design database operable to store the design data.

33. (New) The network of Claim 27, wherein the computer network comprises a local area network that includes the computer and the database.

34. (New) The network of Claim 27, wherein the computer receives the photomask specification data and the design data from the customer computer via an internet connection.

35. (New) A method for generating instructions for use by photomask manufacturing equipment, comprising:
providing a network connection between a computer and a remote customer computer;
receiving, at the computer, photomask specification data and design data from the customer computer via the network connection;
storing the photomask specification data and design data in a database;
generating fracturing instructions and control instructions based on the photomask specification data using a command generator in communication with the database; and
generating fractured pattern data from the fracturing instruction and design data using a fracture engine.

36. (New) The method of Claim 35, further comprising receiving the design data from the customer computer in electronic form.

37. (New) The method of Claim 35, further comprising receiving the design data and the photomask specification data during a single network connection.

38. (New) The method of Claim 35, further comprising delivering the control instructions to data storage accessible by the photomask manufacturing equipment.

39. (New) The method of Claim 35, further comprising delivering the fractured pattern data to data storage accessible by the photomask manufacturing equipment.

40. (New) The method of Claim 35, wherein the database comprises:
a specification database operable to store the photomask specification data;
and
a customer design database operable to store the design data.

41. (New) The method of Claim 35, wherein the network connection comprises an internet connection.

42. (New) A method for automatically generating instructions for use by photomask manufacturing equipment, comprising:
receiving photomask specification data in an electronic format from a customer computer; and
in response to receiving the photomask specification data from the customer computer, automatically performing operations including:
storing the photomask specification data;
generating fracture instructions;
generating equipment instructions from the fracture instructions; and
electronically transmitting the equipment instructions to photomask manufacturing equipment.

43. (New) The method of Claim 42, further comprising receiving pattern design data from a customer computer.

44. (New) The method of Claim 43, wherein the pattern design data comprises customer circuit design data.

45. (New) The method of Claim 42, wherein the operation of receiving pattern design data comprises receiving the pattern design data from the customer computer via file transfer protocol (FTP).

46. (New) The method of Claim 42, wherein the operation of generating fractured pattern data comprises using a fracture engine to generate fractured pattern data based on the fracture instructions.

47. (New) The method of Claim 46, further comprising receiving the pattern design data at the fracture engine for use in generating the fractured pattern data.

48. (New) The method of Claim 42, further comprising generating control instructions based on the photomask specification data, wherein the control instructions specify where and how patterns are to be written on a photomask.

49. (New) The method of Claim 42, wherein the equipment instructions comprise fractured pattern data and control instructions.

50. (New) The method of Claim 42, wherein the equipment instructions comprise data to be used by the photomask manufacturing equipment to produce a photomask for each layer of an integrated circuit.

51. (New) The method of Claim 42, wherein the operation of electronically transmitting the equipment instructions to the photomask manufacturing equipment comprises electronically transmitting the equipment instructions to photomask writing tools.

52 (New) The method of Claim 42, wherein the manufacturing equipment comprises computer-controlled lithography equipment.

53. (New) A method for generating instructions for use by photomask writing tools comprising:
receiving, at a computer, photomask specification data in an electronic format from a customer computer; and
in response to receiving the photomask specification data, automatically performing operations comprising:
storing the photomask specification data in a database; and
generating a job deck for photomask writing tools based on the photomask specification data.